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PLATES AND ILLUSTRATIONS.

ARCHITECTS OF TO-DAY,	
MR. GEORGE E. HARNEY, - - - - -	66
STABLE, H. W. POOR, Tuxedo Park, N. Y., - - - - -	Plate XL
<i>T. Henry Randall, Architect.</i>	
COUNTRY HOUSE, J. Henry Smith, Tuxedo Park, N. Y., - - - - -	Plate XLI
<i>James Brown Lord, Chas. Volz, Architects.</i>	
COUNTRY HOUSE, Geo. E. Dodge, Tuxedo Park, N. Y., - - - - -	Plate XLII
Plans, - - - - -	71
<i>Harney & Purdy, Architects.</i>	
COUNTRY HOUSE, R. McM. Gillespie, Tuxedo Park, N. Y., - - - - -	Plate XLIII
<i>Bruce Price, Architect.</i>	
COUNTRY HOUSE, A. S. Carhart, Tuxedo Park, N. Y., - - - - -	Plate XLIV
Ground Plan, - - - - -	68
<i>Trowbridge & Livingston, Architects.</i>	
COUNTRY HOUSE, T. G. Condon, Tuxedo Park, N. Y., - - - - -	Plate XLV
<i>H. T. E. Wendell, Architect.</i>	
REID MEMORIAL LIBRARY, Passaic, N. J., - - - - -	Plate XLVI
Plan, - - - - -	70
<i>Jackson, Rosencrans & Canfield, Architects.</i>	
THE VAN WICKLE MEMORIAL GATES, Brown University, Providence,	
R. I., - - - - -	Plate XLVII
<i>Hoppin & Ely, Providence, Hoppin & Koen, New York, Asso. Architects.</i>	
AN ARTIST'S COUNTRY HOUSE AND STUDIO.	
Competitive Design, Geo. L. McElroy, Architect, - - - - -	72
Competitive Design, W. T. Warren, Architect, - - - - -	72
GARDENS, F. W. Vanderbilt, Hyde Park-on-Hudson, - - - - -	73
<i>Jas. L. Greenleaf, Landscape Architect.</i>	
THE CIRCLE HOTEL, New York, - - - - -	74
<i>Jos. Wolf, Architect.</i>	
RESIDENCE, Philip S. Henry, 1053 Fifth Ave., New York, - - - - -	75
<i>Herts & Tallant, Architects.</i>	
DESIGN FOR A COUNTRY HOUSE, - - - - -	76
<i>E. Guy Darwben, Architect.</i>	
DESIGN FOR A GROUP OF WORKINGMEN'S COTTAGES, - - - - -	76
<i>J. J. Talbot, Architect.</i>	

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PROFESSIONAL COMMENT.

QUESTIONS touching professional etiquette sometimes crop up; but we have not yet been able to discover whether there is any well recognized rule amongst architects that will prevent one member from interfering with the employment of another. If such a rule exists there is no one to enforce it, or if there is, the Institute and other professional bodies are seldom disposed to take up such a case. Allegations are easily made, but not so easy to defend or to take up with any degree of success. But if there is no such thing as professional etiquette, there is what is equally binding on conscientious members of the profession, a regard for mutual toleration, a moral sense of right and wrong, or of treating others as we ourselves should like to be dealt with, and this is the main safeguard. Where personal interests run high and often conflict, and where professional education is at a rather low-water mark, we may not be surprised to hear of occasional disputes of a not very edifying kind. But it is not education *per se* that has any restraining influence on moral conduct; indeed, it is often the other way, for the intellectually-trained mind can become an unscrupulous tactician.

Interference with the work of another is not uncommon in architectural practice. An architect's design is often rejected on some trivial pretence, as that of cost, or because the design did not suit the taste of the employer, or because the architect exhibited a little more independence than was agreeable;—when, as a matter of fact, another architect had intervened, had sought an audience with the client, and had talked him over. Such surreptitious dealings are happily not prevalent amongst the profession as a whole; in New York at least, a better tone exists than in the small towns, where a strong rivalry among the profession is found. Clients who do not know what they want are the most easily misled. The architect has to fight against this form of ignorance; unquestionably he is unaware of the stealthy designs of his adversaries, who traffic on the ignorance of the employer. The architect's designs are not understood, the plans are an enigma, and the effect of the building not apprehended. What can be a better opportunity than to introduce to his notice a sketch, colored or shaded? It is really extraordinary how some clients are led on such occasions, how soon they are ready to change their minds in quite another direction. If clients knew their own minds, and relied on their professional advisers, there would be very little opening for the professional intriguer. But they do not, and the profession have to take this into their consideration when they are engaged to prepare designs, and be prepared for any change of mind on the part of their client. Have we not heard of patients who have consulted more than one doctor about their ailments, and have been prescribed for by different practitioners? We may smile at these people's vacillation and credulity. In most cases such lack of confidence in their medical attendant proceeds from ignorance. They think otherwise; there is a safety in numbers or in a multitude of counselors, and as they have to pay, they do as they please. So it is with those who employ an architect: they do so, thinking they will get what they want, but somehow, owing to imperfect instructions, or an architect who will not take his client into confidence and consult his wishes, the design turns out differently to what was expected, and the employer thinks he is at liberty to obtain other designs.

But there is the other side of the matter. Is it reasonable or honest that members of the same profession should be found willing to come to the client's rescue? This is the real point. If the client

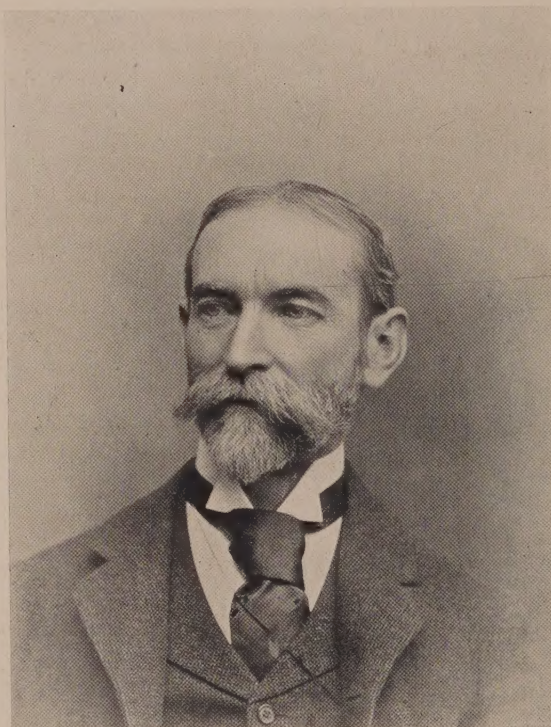
Mr. Bruce Price died in Paris on May 30th, 1903, at the age of fifty-seven years. We do not think that any eulogy could emphasize the loss and sorrow sustained by the profession in his demise.

having instructed Mr. Smith to make designs for him, altered his mind and consulted Mr. Brown, the latter should be prepared. Mr. Brown should ask if the said client had engaged any professional man, and being informed that he had and the plans had been prepared and approved by the said client, Mr. Brown should unhesitatingly refuse to give any advice or design. This would be the right behavior in the opinion of his brother professionals. Mr. Brown's argument would be that as Mr. Smith had been professionally employed to prepare designs, it would be not in good taste to interfere even in giving suggestions that would appear to compromise Mr. Smith's position. But a different view of the case would be taken by some members without incriminating their conduct. Mr. Brown might say: "The client comes to me as an independent architect to ask my advice on a question of design, and asks me to furnish him with sketch designs. I know nothing of Mr. Smith or what he has done (the architect's name may even not be mentioned), and I give my personal ideas and a sketch of what I propose, not in any way to get Mr. Smith out of the job and to be employed myself, but simply as a consulting architect. I have not gone out of the way to seek the client's favor—he comes to me, and I simply give an opinion." In some such way as this a large number of professional men would be quite willing to act or give advice to anyone who came or wrote to them. They might justify their conduct by referring to medical experts and consulting physicians, who do precisely the same thing at the instance of the attendant medical man; or to the legal profession. An architect engaged in carrying out a building for a client from his designs might even suggest such a reference. We should be sorry to say such a course as here suggested would not be disquieting to the professional man engaged, and be resented by him. He would not unnaturally think such a course

was a reflection on his ability; that the client had a doubt in his own mind; but still, such a course, unpleasant as it appears, may be explained without in the least casting any reproach or throwing blame upon the architect engaged. It may only mean that the client wishes to be fully satisfied about the design he has selected, just as a man suffering from some malady may desire the professional opinions of other medical experts. In valuations of property, compensations, and the like, more than one professional man is consulted, and why should it not be so in designs? This question may be answered: In questions based on science, facts, and figures, there is safety in referring to more than one person; but in artistic designs one mind is generally better than many, and a Round Table Conference is not the best way of coming to an agreement that would be a success in a work of architecture. But this is not precisely the way to look at it. Many cooks spoil the broth because

they have a hand in its making; but it is different when independent minds each makes his own or prepares his own design. The idea of inviting more than one artist is on the principle of competition. Most people act on this principle. they go to the tradesman who has the largest stock of goods; they do not confine themselves to one tradesman, but select from many in buying their furniture, carpets, or wall papers. When they go to professional men they pick out the lawyer or doctor that they like or know something about; but when they employ an architect they are to a certain extent in his hands, and if they do not like what he gives them, they find some means of obtaining other advice. There is, therefore, some ground for justification in acting on this principle of choice; the difficulty is it does not promote professional interest, there is a great temptation to call in someone else. We live in an age of competition. Half a century ago a very different state of things obtained. There was

more exclusiveness; when an architect was consulted he possessed the full confidence of the client, there were few practitioners, and therefore competition was not so keen. It is very natural and right that the profession as a body should endeavor to maintain this standard of conduct. On the contrary, it is to be remembered that greater laxity prevails now, and it is scarcely just to hold that every interference or this kind is dishonest and unprofessional.



Architects of To-Day.

MR. GEORGE E. HARNEY.

There is a much more reprehensible mode of interfering—namely, where the architect makes the first advance. A client of an architect is waited upon by an outside architect who thrusts himself forward with the ulterior object of being employed. We have heard of some underhand modes of doing this. A has been engaged to make designs, B hears of it, and calls upon the client with a portfolio of ready-made designs, or more tactically introduces himself through a joint friend, who man-

ages to see the client, and introduces B's name and work. This kind of recommendation goes a long way, especially when the "friend" happens to be a "customer of the client," or holds an influential position in the town. The client so disposed tries to back out of his engagement with A by saying the estimate is too high, or that he has changed the site, after having probably appropriated all that was good in A's design. If the client lives a long way off, another subterfuge may be employed, that he has decided to buy a house. In these and other ways a gross injustice is perpetrated upon the architect, who can only make a claim for preparing designs. So barefaced and unprofessional a proceeding can only be checked by the good taste and education of the employer in turning a deaf ear to all appeals, or by the force of professional opinion. Unfortunately, the men who do not scruple to stoop to such proceedings are beyond the control of the profession.

They do not, as a rule, belong to any professional society, and therefore can only be dealt with as interlopers or hustlers, unworthy of the respect of the community. The only way of checking them is by educating the employers to a higher sense of their responsibilities as employers of professional skill. It is of little use to preach ethical principles or etiquette to such men, who are deservedly held up to opprobrium. We have heard of builders trying to undercut the estimates of other competitors by a few dollars; but it is much worse to find a member of the same profession trying to oust a brother who has been engaged, thrusting himself forward by undermining his ability or reputation with his employer. Men of this stamp can succeed only by endeavoring to show some superiority either in design or experience they possess, which they generally do by criticising or pulling to pieces the work of their rival. The average client is seldom slow to understand the true motive; but is simply talked over. Knowing nothing about architecture, he readily accepts the bait offered; it may be a reduction in cost or commission, which always appeals to the public where other things fail. The attractive drawing also has its influence; but both these subterfuges would be powerless if the employer could be brought to understand that it is the actual building he wants, that representations as to cost or appearance count for nothing. It will be thus seen that the observance of honorable dealings and etiquette among members of the profession greatly depends on the intelligence, honor and straightforwardness of employers. With a low standard of education and morality we must expect to find a corresponding degree of obtuseness in right conduct and feeling amongst the profession.

At a recent architectural conference the ethics of the profession were made the subject of a paper and a discussion, but nothing practical followed. What is necessary in the interests of the profession is that fundamental points or questions should be settled once for all; such questions, for instance, as touting, interference with brother architects' work, calling on other architects' clients, inclosing testimonials to clients and members of committees, to competition promoters, accepting any work that would compromise any professional brother's position, giving evidence in courts of law prejudicial to architects. These and other matters, if once decided upon in a representative conference of the profession, and the conclusions issued in a code to every practicing architect, might be the means of uniting the profession; but it may be asked whether architects can ever agree on any subject of this nature? One learned judge declared not many years ago that "There are no such unsatisfactory men as architects." He meant to say they could not come to an agreement, like other professional men. This impeachment was hardly just when we consider how lawyers disagree on fundamental questions, but they thrive by disagreement, which architects do not; it is the same with medical practitioners. In questions of art the bases of argument are not so readily found as they are in matters of science, though we all know how scientific men disagree both theoretically and in matters of fact. Ethical principles depend on nice points, and few men will be found to be very precise in laying down rules of conduct that clash with their own practice.

Architects should not have any commercial connection with tradesmen or companies dealing with materials or processes. The Société Centrale des Architectes Français published a code a year or two ago, signed by M. Gaudet and M. Charles Garnier, President of the society, in which it is stated the conduct of the architect is incompatible with that of contractor, manufacturer, or dealer in

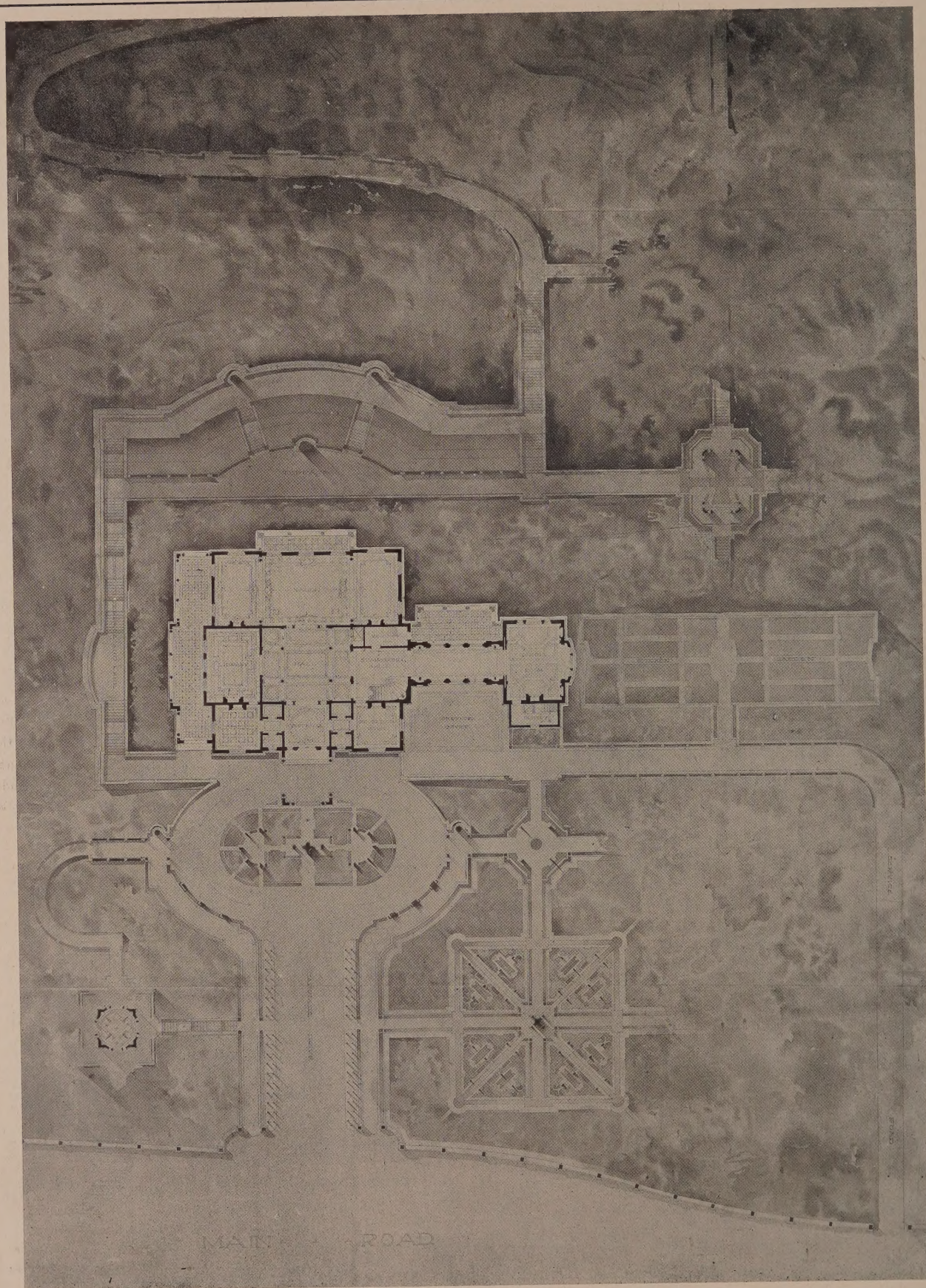
materials employed in construction; it declares that the architect must be paid only by fees, to the exclusion of every other kind of profit, and must not engage in any operation which would bring to him discounts or commissions. He must abstain from personal advertising, from distributing prospectuses, all offers of service through newspapers, posters, or other means, must not engage as business agent, manager, or transact business concealed from his client. According to these rules it would not be possible for any professional man to have any commercial transactions with tradesmen or manufacturers. These rules might well be promulgated by the councils of all professional bodies. One of the grossest forms of misconduct is that of receiving commissions from tradesmen, and until this is abjured we cannot expect other ethical laws to be observed.

THE Society of Beaux-Arts Architects has established a course of study for architectural draughtsmen, modeled on the system adopted by the Ecole des Beaux-Arts, with the intention of cultivating among them the principles of their art which the members of the Society have learned in Paris. Any group of students may choose a master under whom they wish to study, and under the auspices of the Society they may exhibit their work done in competition with other groups of students studying under other masters. A jury drawn from members of the Society will judge their work and give awards to the drawings which merit them. It is not the object of the Society at present to provide a complete course in architecture, as this is done by several universities throughout the country, but so to prepare draughtsmen in offices that they shall be familiar with the general principles of architectural composition in plan and in decoration, and a sufficient knowledge of archæology, or the study of styles, to enable them to discriminate between the different epochs of design. The course is divided into two classes: Class B, into which any one of either sex may enter without any preliminary examination. Class A, which the student reaches after having received certain awards in Class B. On completing the course the Society awards a certificate of proficiency. The course is not limited by time, the student being allowed to pursue his study at his own will or whenever he has the opportunity to do the work. The competitions of the Society are arranged just as at the Ecole des Beaux-Arts. The students all present themselves at one time and place with T square, triangle and drawing board, and to every one is given the programme of the current problem. From midday till nine o'clock they are at liberty to study its conditions, and at that time they must hand in to the person in charge a small sketch of their solution, taking away a copy of their sketch with them. They then have two months to work up their sketch, and at the expiration of that time it must be delivered for exhibition and judgment. The drawings are shown for a week and the jury criticises and makes its awards. During the year there are given out five problems in plan, three in esquisse-esquisses or nine hour competitions rendered en loge and two in in archæology; there is also a class in modeling, a class in drawing from the cast, an examination in general history, and a competition for two prizes in planning. Mr. Lloyd Warren is the chairman of the Committee on Education.

AT A recent meeting of the New Jersey Chapter, A. I. A., the following resolutions were passed:

WHEREAS, Certain architects are in the habit of offering sketches upon approval and preparing plans in public and private competitions without compensation, and where professional advisors are not employed to prepare a schedule of competition and to pass upon the merits of the various plans submitted, and

(Continued page 69.)



GROUND PLAN, COUNTRY HOUSE, A. S. CARHART, TUXEDO PARK, N. Y.

Trowbridge & Livingston, Architects.

(Continued from page 67.)

WHEREAS, The code of professional ethics of this Chapter and other similar bodies distinctly states that such practices are unprofessional and should not be entered into by any architects,

BE IT HEREBY RESOLVED: That the president of this Chapter be requested to appoint a committee to ascertain the names of the architects who are in the habit of violating the code of ethics in this particular, and to report back to this Chapter a list of said names, together with suggestions as to methods which may be pursued in order to reduce said practice to a minimum.

WHEREAS, It has been brought to the attention of members of this Chapter that methods have been pursued in connection with securing public work in the various cities of this state which are not in accordance with the code of professional ethics adopted by this Chapter and all other architectural bodies, and

WHEREAS, Charges have been made that certain architects have been guilty of offering financial inducements to various bodies in order to secure appointments to plan and supervise the erection of certain buildings,

BE IT HEREBY RESOLVED: That the president of this Chapter be requested to appoint a committee to investigate the truth of said charges and to report back to the Chapter as soon as possible.

MR. HUGH ROBERTS of Jersey City and Mr. Charles P. Baldwin of Newark, have been reappointed members of the New Jersey State Board of Architects by Governor Murphy for a term of two years each. At the annual meeting of the Board on May 15th, Mr. Baldwin was re-elected president and Mr. Roberts secretary and treasurer. The other members of the Board, Messrs. Arnold H. Moses of Camden, Charles Edwards of Paterson and David B. Provost of Elizabeth hold over for another year.

A NUMBER of communications have appeared in the *New York Times* concerning the performance of architectural work by contractors. The articles state that this is caused indirectly by the architects themselves, as many of them rely upon the contractors to attend to their engineering details. This necessitates a contractor establishing a good engineering department to compete with other contractors. Having once established such, it is very easy to employ architectural draughtsmen as well. Then it is natural for him to compete with the architects and do the complete work. His office of competent structural men appeals to the owner more than the architects' which are strong with men of artistic training. These articles claim that the architects' indifference to the structural and other engineering features of buildings is largely due to defects in early training and that the teachers giving this instruction have not the training and the experience to impart this knowledge or inspire respect for it. If this is the case it is time our architectural schools are broadened to keep pace with the times. The main training should be with the design and planning of buildings for the purposes to which they are to be employed. Yet the other branches which play so important a part in a successful building, should be well taught. The architect should be capable at least of selecting associates competent to do the work, instead of leaving any of his work for the contractors to do. There is a tendency in our schools to have all the branches taught by their own graduates, who are too often unsuccessful practitioners. And men of artistic temperaments are called upon to teach subjects they do not themselves understand. They are like the old time professor who was obliged to skip a portion of his subject because rats had nibbled off the corners of his copied notes so he could not read them to his class.

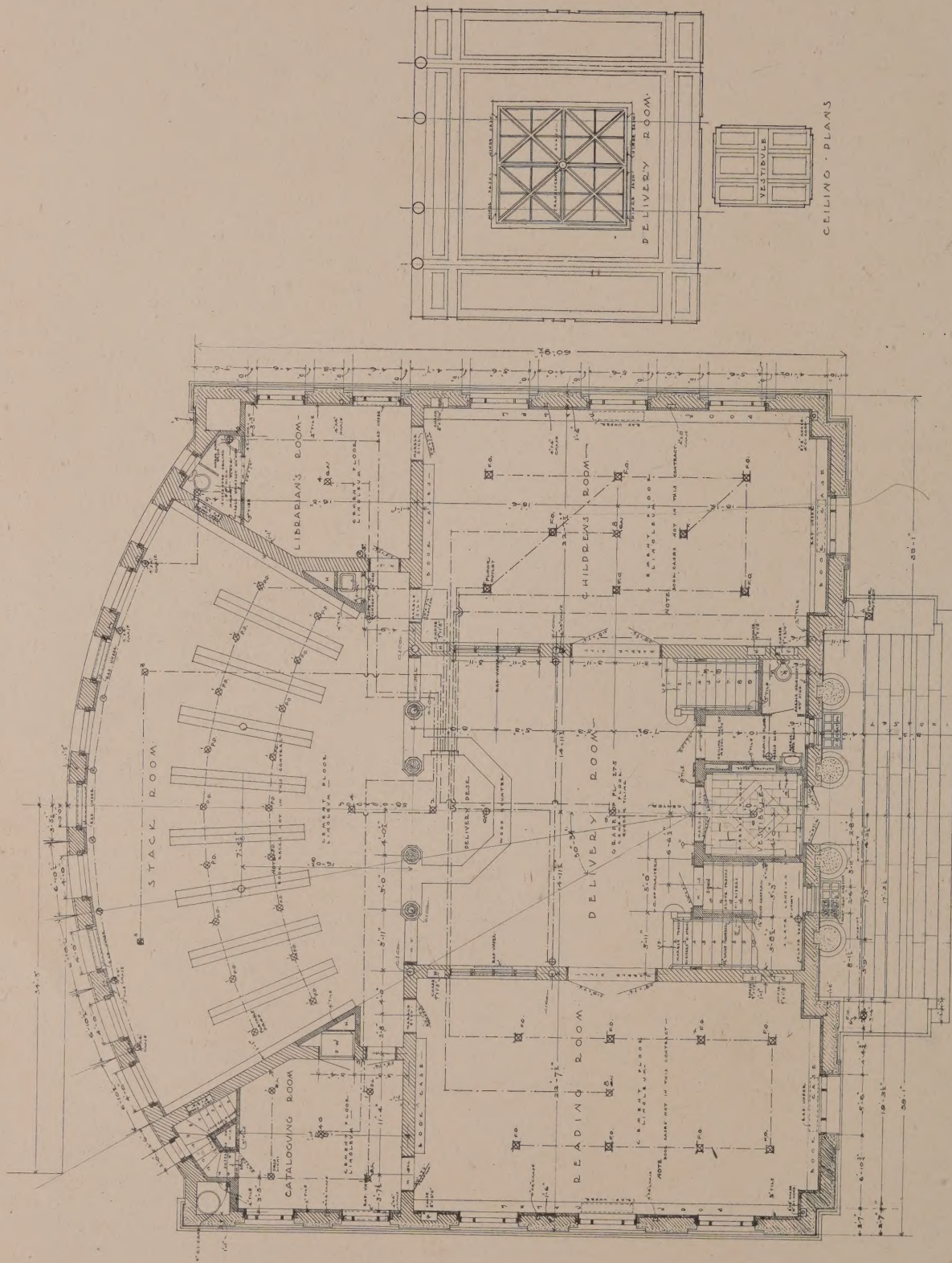
ART in its true and honest meaning is the co-operation of the architect and craftsman in producing the most thoughtful and conscientious result.

ENGINEERING AS AN ARCHITECTURAL ELEMENT.

S. H. ADAMS.

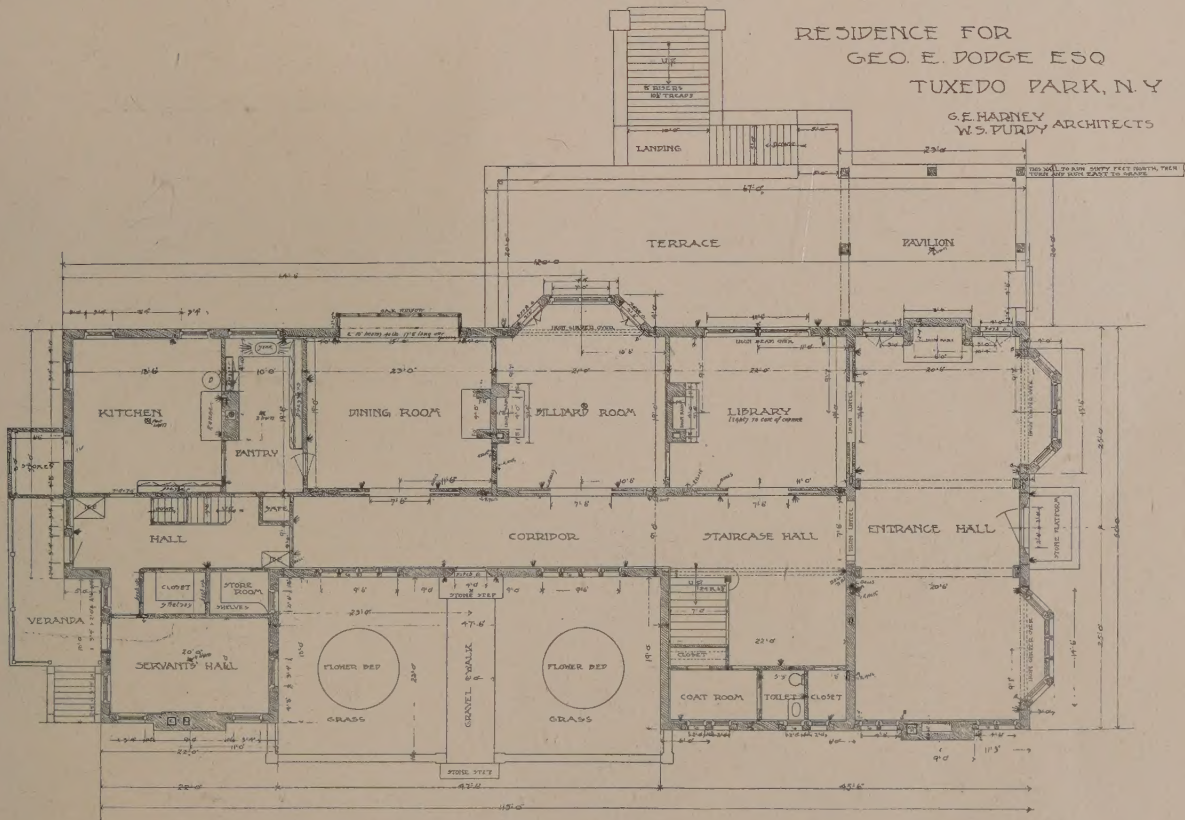
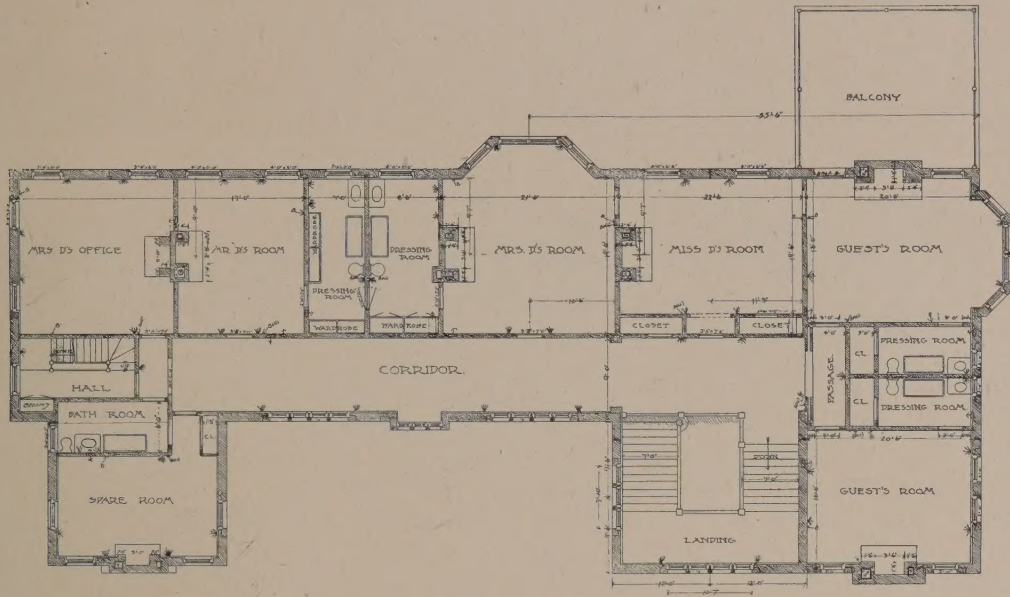
HOW far a knowledge and study of engineering are necessary for the kindred profession of architecture is a question that has often been debated from different points of view, but without any satisfactory result. To one class of minds engineering is supposed to be the basis or ground work of all architectural construction; to another class of exponents, architecture is said to begin where engineering leaves off; and there is a third view which makes it a distinct profession, as applied to special purposes, and having its own laws and limitations. But we must first clear the mind of the loose and ambiguous meaning attached to the word. If engineering is considered to be a science dealing with certain mechanical necessities of the day—the sense connoted at the birth of the profession, when it was used to distinguish those engaged in the construction of the steam engine—then the latter interpretation appears to be the most reasonable. But if by the word “engineering” the principles distinct from the usual application of the science is intended, by which we mean those principles of science which it has in common with all construction, static and dynamic laws, for instance, then we should say engineering—using the word for what it implies—is only another word for construction, lies at the basis of all architecture, and cannot be separated from it. Unfortunately many people confound the meaning of the word with the work of the engineer as we generally understand it, and in this way it is not inaptly thought to be somewhat foreign to the work of the architect. In this connection we may just refer to the modern distinction—there was none in ancient times—between building and architecture. As Mr. Garbett points out in his work on the “Principles of Design in Architecture,” the distinction is of very recent origin, and it is peculiar to the present age and confined to the English nation chiefly, that a building may be unarchitectural. We may read, instead of building, “construction.” This common error is at the root of all our false architecture, because if we can build or construct without any attempt at architecture, it is admitting that architecture is a something outside use and stability—a very pernicious idea that has been the foundation of all the false and dishonest views of architecture as a constructive art, and which has led people to thinking that it is a sort of decoration applied to building. According to this distinction between the two, our modern buildings are admittedly not architecture, and they pretend not to be so characterized. Having noticed this modern distinction between building and architecture, it will not be difficult to show why engineering or construction has been so long considered a separate thing. Two years ago at a congress between members of the engineering and architectural professions, a few principles were discussed, with the idea that some mutual agreement would be arrived at between the two professions; but nothing came of it. To take the subject of bridge design, architects often complain, and quite justly, of the mistakes and failures in design made by engineers; but as we have pointed out, the architect must be prepared to enter into the subject from an engineer's point of view. Before he is in a position to criticise anything about bridge design the problem must first be regarded mechanically, and, secondly, with reference to all the actual conditions of the structure and the materials to be employed. It is too often the case the architect approaches the subject from his own point of view, ignoring the principles upon which the engineer proceeds in his work. Both may be imperfect; but by discussing

(Continued page 74.)



FIRST FLOOR PLAN, REID MEMORIAL LIBRARY, PASSAIC, N. J. For Elevation and Details see February 1902 ARCHITECTURE.

Jackson, Rosencrans & Canfield, Architects.

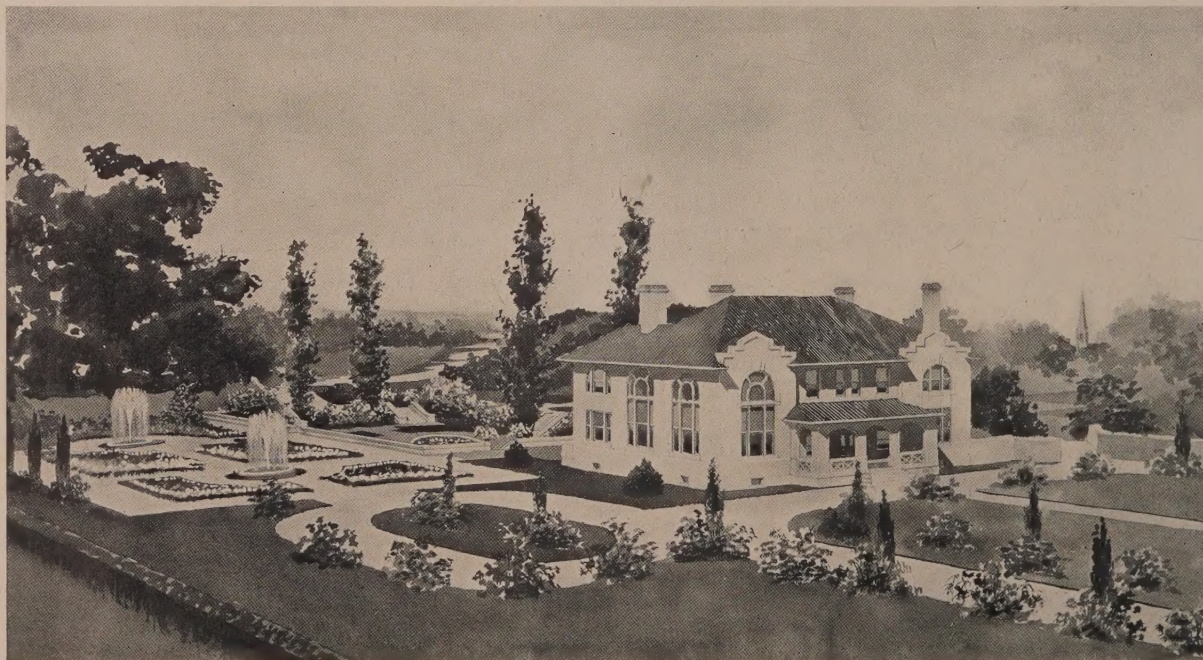


PLANS, COUNTRY HOUSE, GEO. E. DODGE, TUXEDO PARK, N. Y.

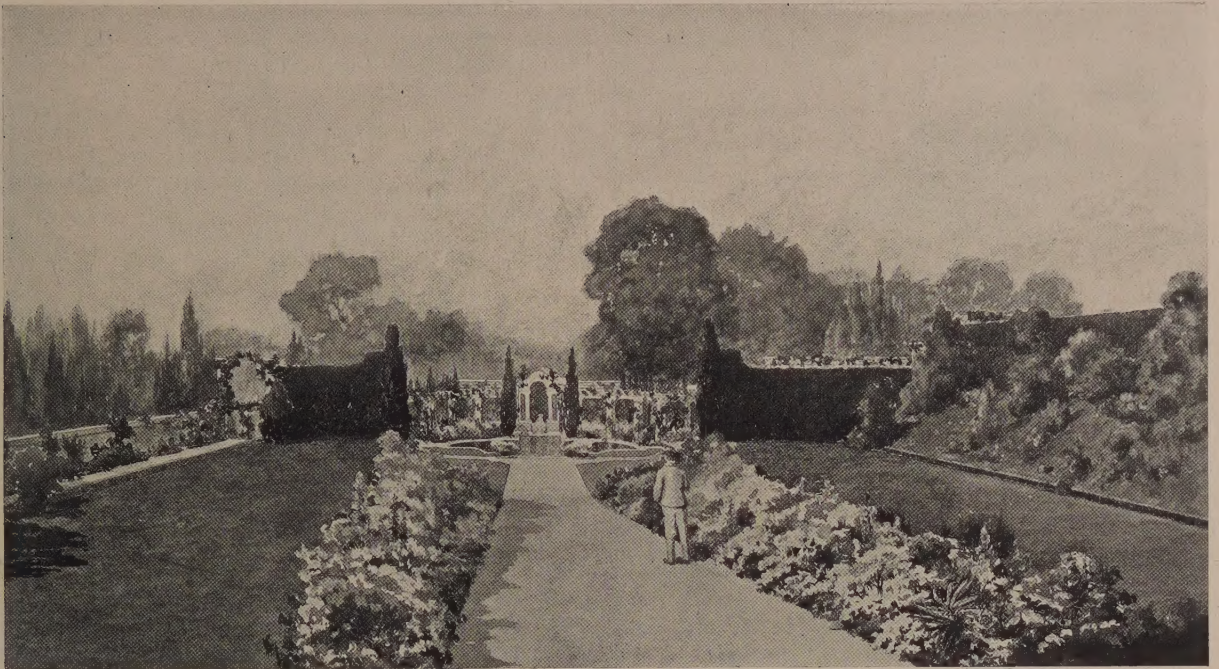
Harney & Purdy, Architects.



COMPETITIVE DESIGN, "ARCHITECTURE" COMPETITION—AN ARTIST'S COUNTRY HOUSE AND STUDIO. W. T. Warren, New York.

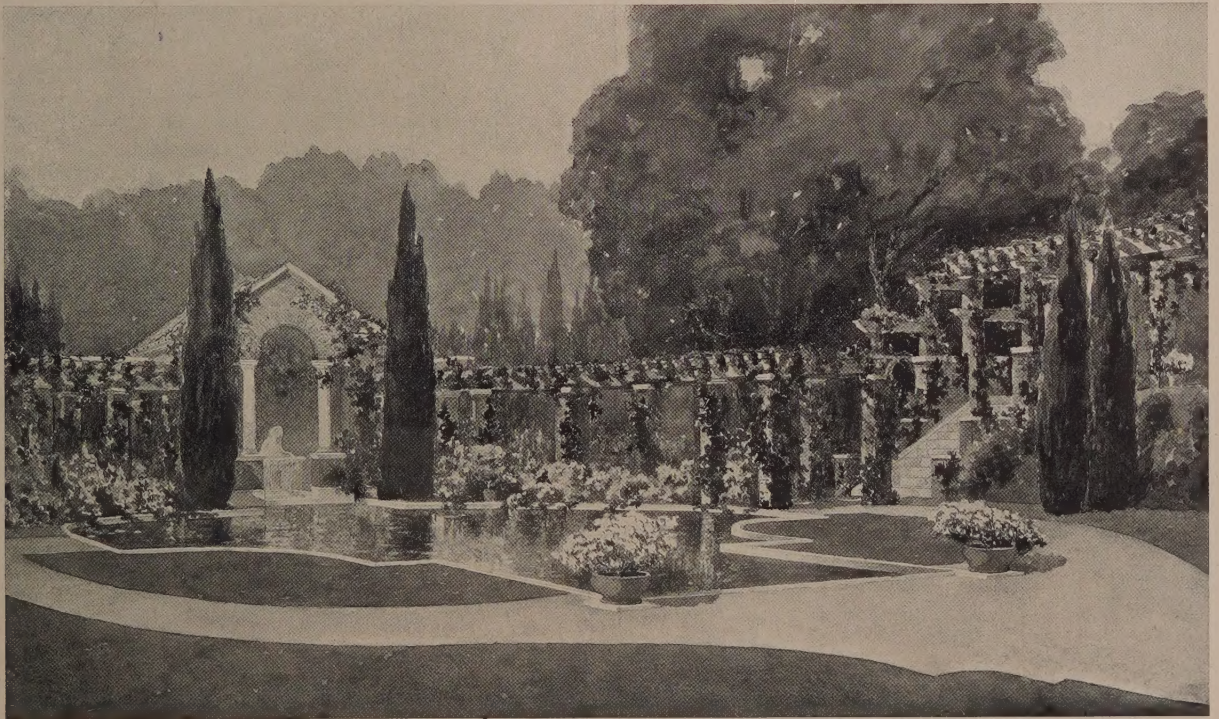


COMPETITIVE DESIGN, "ARCHITECTURE" COMPETITION—AN ARTIST'S COUNTRY HOUSE AND STUDIO. Geo. L. McElroy, New York.



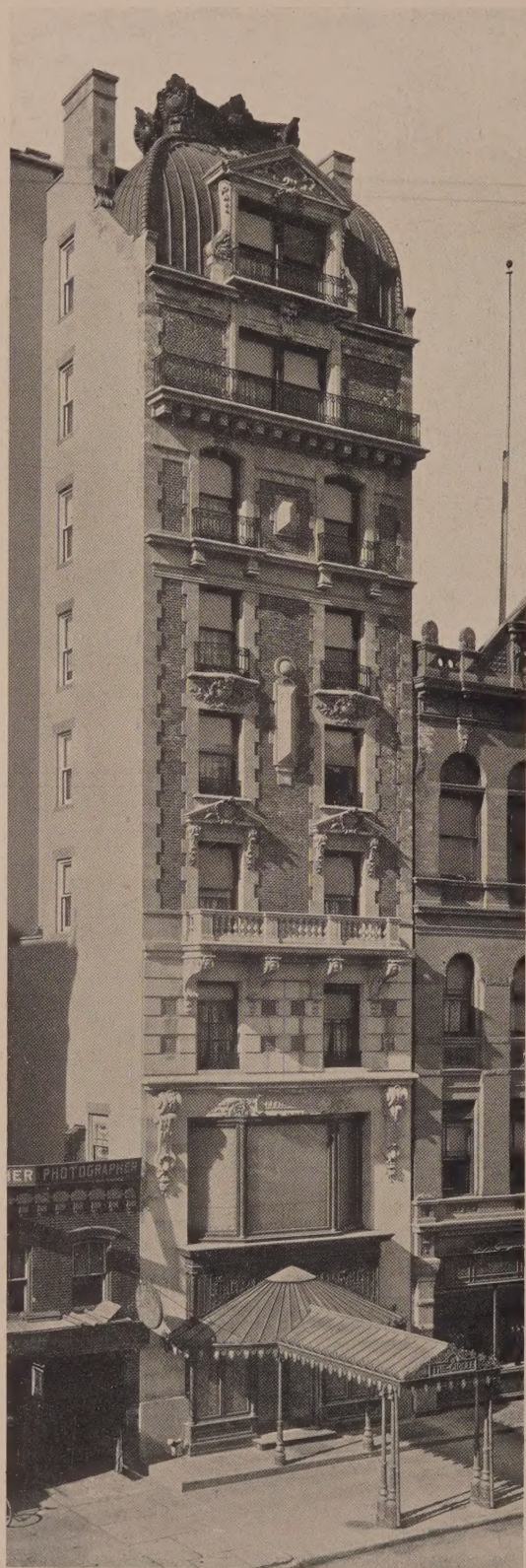
THE WALK. GARDENS, F. W. VANDERBILT, HYDE PARK-ON-HUDSON.

James L. Greenleaf, Landscape Architect.



THE FOUNTAIN POOL. GARDENS, F. W. VANDERBILT, HYDE PARK-ON-HUDSON.

James L. Greenleaf, Landscape Architect.



THE CIRCLE HOTEL, NEW YORK.

Jos. Wolf, Architect.

(Continued from page 69.)

the subject and conceding certain points on each side, a more satisfactory understanding may be gained. Each profession ought to consider the views of the other in structures of this kind, to do which architects must acquaint themselves with the principles upon which the engineer works; and the same attitude should be taken by the engineer toward the architects. Only by this spirit of mutual concession and comparison can engineering in its relation to building be dealt with. Much of the ugliness of our factories and engineering works—such as railway stations—might be avoided, for instance, if the engineer and the architect agreed between themselves upon fundamental or root basis of design. Construction, as we have hinted, is common to both professions: both use the same materials, and to a certain extent employ the same methods of construction; but each has a rather different way of treating material, of regarding it as an element in design. The engineer is often wasteful in his expenditure of material in his works; in other instances he reduces it to a minimum without corresponding advantage, as in iron and steel construction—bridges and roofs of great span; on the other hand the architect uses it subject to certain rules of proportion; he treats it æsthetically rather than mechanically. It appears to us the principal difference that separates the engineer's conception of design from that of the architect, is the use and treatment of material, and the first step to an agreement between the two professions is the recognition of a basis or general law that will hold good both physically and æsthetically. Once a relation between these two views is discovered, there will be an end of the differences which now divide these professions. They are both engaged in construction, up to a certain point the same; but the architect tries to give expression to the functions of his work. No design worthy of the name can be expected from a mere mechanical use of material, and it is the impossibility of conceiving a building as expressing any function that places the engineer's work at a disadvantage.

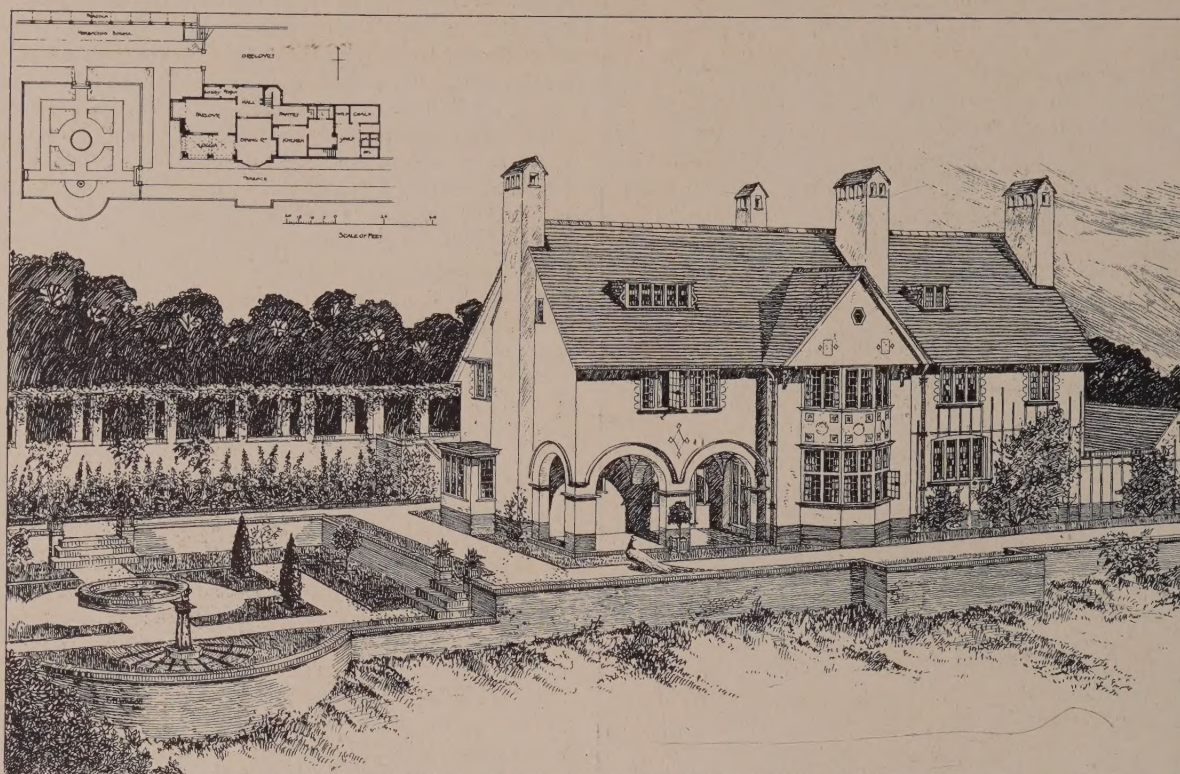
It is this misconception of what construction is in its higher or artistic sense, that has given rise to the separation between the two professions and to the distinctive meaning attached to the term "engineering." Every great builder of our Mediæval cathedrals was an engineer, if we accept this wider view of the word; but his engineering was more truly expressed under the term "architecture," which included construction as a matter of course. But it has happened that the modern idea of engineering is something independent of architecture, that can be added to it—something that can be learned or not. And the profession of engineering has for good reasons kept up this exclusive idea—that it is something very different to architecture based on scientific laws. But architects themselves have rather emphasized the exclusiveness by giving away their case. Such an authority as Fergusson has for instance written about construction as if it was the exclusive object of the engineer, with which the architect had little to do. Thus we read: "Construction has been shown to be the chief aim and object of the engineer. With him it is all in all, and to construct scientifically, and at the same time economically, is the beginning and end of his endeavors. It is far otherwise with the architect. Construction ought to be his handmaid—useful to assist him in carrying out his design, but never his mistress, controlling him in the execution of that which he would otherwise think expedient. An architect ought always to allow himself such a margin of strength that he may disregard or play with his construction," &c. Again, in Fergusson's Introduction it is stated: "If these premises are correct, the art of the builder consists in merely putting materials together, so as to attain the desired end in the speediest and simplest fashion. The art of the civil or military engineer consists in selecting the best and most appropriate materials for the object he has in view, and



RESIDENCE, PHILIP S. HENRY, 1053 FIFTH AVE., NEW YORK.

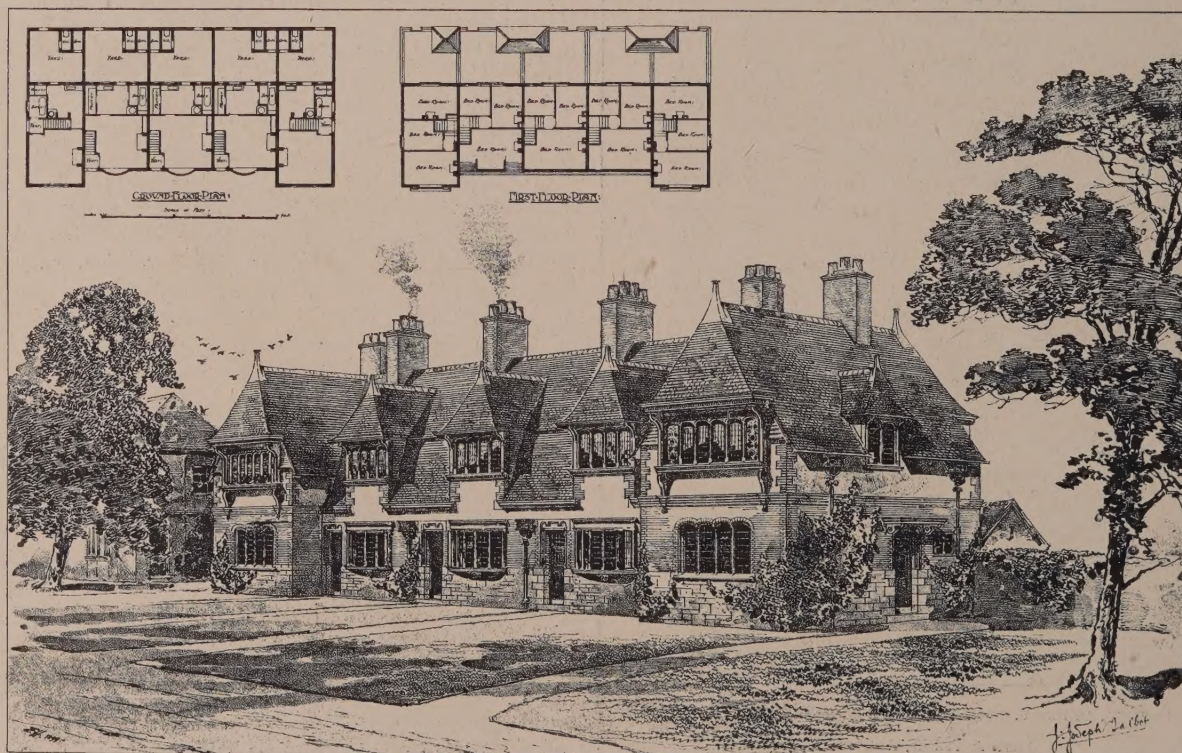
Herts & Tallant, Architects.

using these in the most scientific manner, so as to insure an economical but satisfactory result. Where the engineer leaves off, the art of the architect begins. His object is to arrange the materials of the engineer, not so much with regard to economical as to artistic effects, and by light and shade and outline to produce a form that in itself shall be permanently beautiful. He then adds ornament, which by its meaning doubles the effect of the disposition he has just made, and by its elegance throws a charm over the whole composition." Without doubt Fergusson here expresses very correctly the general view—that architecture is an art devoted to the ornamental, rather than the useful or constructive; but, really, it contradicts the true interpretation of architecture as an art based on construction. The statement that the architect's work begins where the engineer's leaves off gives away the architect's claim altogether. Let us put a real case. A building, say a modern, "sky-scraper," constructed of steel filled-in, is erected according to an engineer's design; after the steel skeleton or framework is finished the architect is called in, and the work of beautifying or covering the building with ornament is commenced. This is literally carrying out the formula: "Where the engineer leaves off, the art of the architect begins." Architecture is by it reduced to the art merely of clothing the design of the engineer. Of course the author did not mean to convey this meaning, but that the art began after construction had been satisfied. Practically, however, the meaning is the same: the phrase implies, at least, that there is a separation between construction and architecture; that the former is the work of the engineer. We cannot conceive a statement more fatal to the pretensions of the architect that he is the designer of buildings based on construction. As a matter of fact, architects design their own buildings, plan the disposition of the walls and piers and floors without any engineer, and only call him in to carry out details of ironwork; he, in fact, constructs as well as adorns. There is really no separation of the building from its artistic decoration. Such being the case, the definition misrepresents the real facts. The engineer is called in, it may be, to consult on points or details of the construction as designed by the architect, but his rôle is not that of constructor. It is well to make clear this fact, in these days when the engineer's claims are making themselves heard. Architects are too much disposed to give away their heritage, if by so doing they can lighten their work and responsibility; but it is a fatal snare, which sooner or later will weaken the architect's position. But even Fergusson is hardly consistent when he says it is not essential that the engineer should know anything of architecture; but, on the other hand, it is indispensably necessary that the architect should understand construction. "Without that knowledge he cannot design, and although it has been conceived by some that it would be better to relegate the mechanical task to the engineer, and so restrict himself entirely to the artistic arrangement and ornamentation of his design, such a course would be fatal to the development of architectural style." This statement to some extent contradicts the former, but corroborates all that we have said. It has been by delegating the constructing problems to the engineer that the modern architect has lost his foothold. There are occasions when he may consult the engineer; but he should be jealous of handing over to him any part of the design. The latter part of the sentence conveys also a lesson of considerable moment. The abandonment of construction in design would quickly lead to the deterioration of architecture by losing sight of the structural motives of design. If we accept the view that living architecture has grown out of real building, we cannot afford to dispense with any scientific rules; we may call them engineering or not, but we should endeavor to master the use and limitations of materials. The arbitrary separation that has resulted between engineering and architecture has arisen, as we have said, by accepting styles as the basis of our design, neglecting the principles of construction which have created them.



DESIGN FOR A COUNTRY HOUSE.

E. Guy Dawben, Architect.



DESIGN FOR A GROUP OF FIVE WORKINGMEN'S COTTAGES.

J. J. Talbot, Architect.